

Public Design for Changing Urban Needs

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Abstract: More people are living in densely populated cities whose urban needs change rapidly and continuously. As in many Asian cities, their public spaces, and in particular streets, today change from serving fixed and limited particular functions to more dynamic functions, including an increasing number of celebrations, social actions, demonstrations, meetings, special and sudden events. However, studies, as well as mass media reports, always criticise the current public facilities such as street furniture as not being flexible enough to deal with such new and continuously changing urban needs. Although in recent years there have been some improvements, they are technical-oriented, piecemeal or inflexible in catering to some particular areas or special interests of developers. Since the late 1990s, the Public Design Lab of The Hong Kong Polytechnic University has conducted design research in different cities, in particular in Asian cities, such as Hong Kong, Singapore, Beijing, Shanghai, Tianjin, Taipei, Tokyo, Seoul, Bangkok and Kuala Lumpur. Taking Hong Kong as a core case and other Asian cities as supplementary cases, this paper reviews the practices (i.e., policy, design, management) regarding public facilities matters in metropolitan cities. This paper also aims to carry out a balanced exploration and discussion on the topic, and advocates an all-round approach applied to public design for changing urban needs.

Key words: *Public Design, Urban Needs, Changing*

1. Introduction

People are now living in a continuously changing world. In particular, the living environment has rapidly changed in order to fit for the different and changing needs and expectations of people due to changing social, cultural, economical and political reasons. In particular in Asia, the speed of development of the city environment is quicker than ever. Among all kinds of spaces being changed under the recent urban development, public space, such as streets, markets, plazas as well as different types of open spaces, is one of the significant urban elements affecting people's (including residents' and visitors') quality of life [5-7, 22, 24].

In recent years, more and more people put a higher expectation on the quality of public space environments and facilities. Governments of different cities, in particular Asian cities, have also continuously increased the amount of money in establishing new and maintaining existing public space facilities. As an example, the Hong Kong

government spends billions of dollars every year to maintain good quality public environments and install new and updated facilities [23, 28-30].

In addition, more governments, developers, design and planning professionals, researchers and the general public have recognized the relationship between the quality of public space and the quality of everyday urban life [1, 5-6, 16]. In fact, as early as the ancient Greek age, people already identified that public space is the most important “sphere” and “space” for nurturing people’s citizenship and to be more civilized. A classic publication by the Design Council et al. also stated: “Public and open spaces are essential parts of people’s living space ... Poorly designed environment and facilities, including street furniture and open space facilities, can be a *nightmare* for residents and visitors” [4, p.5]. Moreover, increasing numbers of researchers and designers in recent years are recognising that public space not only provides the functional needs of city users, but also fulfills their social, cultural, psychological and ideological needs [12, 15, 18, 25]. Researchers and designers also recognise that public space and facilities today are required to meet the “new needs” of society [3, 12, 22, 24].

However, whether the existing policy, implementation and management of public space and facilities meet the new and changing urban needs is another question. In fact, as the example in Hong Kong proves, complaints about the deficiency of public space and facilities are always heard [17, 23].

2. Case Studies on Public Design in Hong Kong

Since the late 1990s, the Public Design Lab of The Hong Kong Polytechnic University has conducted research on new and changing urban needs and “designing for the public”. The Lab researchers have carried out case studies related to different kinds of public spaces and facilities (including different types of open spaces). The key aims of the studies are to review the recent investigations and generated understanding of public spaces, and to identify the limitations and problems of existing common environments and facilities. The scope of research includes different public spaces in urban areas. Most of the studies have been carried out in Asian cities (for example, Hong Kong, Beijing, Singapore, Bangkok), while several studies were carried out in cities of western countries (e.g., Boston, New York, London). Among all, Hong Kong is the city with more in-depth studies which include longitudinal studies for more than fifteen years.

In the case studies in Hong Kong, action, participatory and inclusive research approaches have been adopted. The projects have taken research as a series of *continuous* actions so that finding and feedback of each round of study were applied for further study. Besides background studies on the city development and urban public environment, different research activities have been conducted. The research activities include:

- Semi-structured interviews with the government officers who are responsible for the planning, implementation and management of public spaces and facilities.
- Questionnaire surveys with the city users (including local residents and visitors) on the views, needs and expectations on public spaces.
- Telephone interviews with the local residents on the views, needs and expectations on public spaces.

- Intensive observations on selected sites (i.e., densely populated districts) for the understanding of “user-reception” of public spaces. (For the detailed definition of “user-reception, see [22]).
- Direct interviews with the city users for their comments on the existing public design.
- Direct interviews with the city users for their comments on public design of other countries/cities (if they visited other places before).
- Semi-structured interviews with the planners, architects and designers regarding their general practices related to public design, their comments on the existing public design, and their expectations of improvement on public design.

Besides, several groups of people from different age groups and gender groups have been invited to actively participate in the research process. For example, in a case study conducted in 2007 and 2008, a group of old people aged 60 or over, a group of young persons aged between 12 to 18, a group of blind people introduced by community centers’ social workers were invited to participate in the workshops. At the end of each project (case study), different parties related to and were interested in the design of public spaces (for example, government officers, NGO representatives, private developers, general public, people with special needs) are invited to participate in the analysis.

3. Findings and Analysis

3.1. Deficiency in Research and Practice in Public Design

In many of the Asian cities, living standards are rapidly improving. In particular in urban cities, people are having a better home environment and furniture. However, except those public spaces, such as theme parks, shopping centres and entertainment places, with attractive decoration and good facility provision for the promotion of consumption, design quality of most of the public spaces is deficient.

According to the research findings related to all public matters, there are several causes for the recent relatively poor quality of public design compared to other areas of design. Some of causes are the ripple effects of other causes:

- Public design is an area still receiving relatively less attention in many places, in particular Asian cities [23-27].
- There is a lack of serious and in-depth studies on public design, in particular regarding the areas related to local needs and lifestyles.
- Most of the existing studies on public design are piecemeal or biased on particular disciplines or areas, while the government research and consultation investigations are mostly focusing on limited aspects, such as functional and economic aspects.
- Most studies, in particular governments’ studies, are also biased on policy and implementation matters, and management matters such as the post-occupancy matters are seldom considered. Even though some of the governments consider policy, implementation and management matters, most of the time the studies are piecemeal and isolated among these matters.

- Professionals have also not got any decent public design reference related to human, social and cultural factors.

Although quite a lot of international and regional meetings and visits among governments of different cities have been seen in these years, when compared to the private living environment and furniture, there is no significant improvement and breakthrough in public design, including the design areas related to environment, product, and visual communication. As agreed by some of the interviewed government officers and professionals (for example, landscape architects, architects, product designers), direct adoption and copy of foreign experience cannot give benefit and serve local needs [24, 27]. For example, according to the case studies in Hong Kong, most existing public facilities (including street furniture) in these the cities are purchased from foreign countries. Quite a lot of these facilities cannot meet the local cultural and social needs. Moreover, most of the claimed professionals responsible for the selection and installation of the public facilities have not received any training about public design.

3.2. Limitations and Problems

Different cities have their particular needs in public spaces due to their particular historical, social, cultural, environmental, economical and political characteristics [23, 27]. For example, some of the cities heavily rely on financial and tourist activities to survive; therefore, the “flow” of people such as visitors in turn gives significant influence on the design of public spaces. Some of the cities have their particular weather conditions which significantly affect the structure and material selection of public facilities. For example, in the places with snow in winter, the design of rubbish bins must consider to incorporate a top cover. With typhoons in summer, designers need to have in mind that rubbish bins should be heavy in weight or firmly mounted to the ground.

According to the findings of the case studies in Hong Kong as well as other supplementary case studies in other countries, the findings regarding common limitations and problems of existing public design (i.e., spaces and facilities) can be summarised as follows:

- In considering the provision of public design, policymakers and professionals (in planning, design and management) seldom take an all-round approach to consider the overall public-space policy, implementation and management matters together. Instead, all these three perspectives are considered separately, or sometimes totally neglected.
- Most of the public designs cannot fulfill different and diverse needs and preferences of users, in particular the minority groups, e.g. in Hong Kong, most of the public spaces and facilities only cater the needs of the majority groups, the minority groups such as the domestic assistants from other countries can get little benefit from these places and facilities.
- Most of the public designs cannot fulfill the new and rapidly changing urban needs. Thus, the governments need to spend a huge amount of effort and resource to change the public spaces and facilities to meet the changes. For example, the Hong Kong government has been forced to spend a large amount of money and manpower to replace rubbish bins due to the implementation of the smoking ban policy in Hong Kong since mid 2007. Besides money and manpower, the government also generates a large amount of harmful

environmental waste due to the abundance of the old type of rubbish bins which are made of non-recycling materials.

- Most of the public designs only serve very narrow types of needs of users. For example, only functional needs are emphasised; while psychological and social needs are seldom considered.
- Some of the public design cannot fulfill the local and community needs. For example, since the mid 1990s, the Hong Kong government has received serious criticism that many existing public facilities purchased from foreign countries cannot fulfil the local need, and reflect and nurture the local and community cultures, senses, preferences and identities.
- The balance between “freedom” and “control” is seldom seriously considered. Same as the criticism on design by Lynch and Carr, in recent years, an increasing degree of control exists in many open spaces [14]. For example, more regulations are applied to many public spaces, in particular those claimed to have new and modern facilities. Public facilities most of the time are used for control, regulation and strict top-down management instead of for the promotion of stimulation, exploration and personal development.
- Many public designs cannot promote human communication and interaction. Even the spaces and facilities provided, which are supposed to have higher flexibility among all types of public spaces, are lacking elements to facilitate communication and interaction. For example, specific facilities are “assigned” to particular user groups such as playstructures are only provided for young children. People of other ages such as older persons are restricted to use these facilities with children.
- Most of the public designs are with assigned function that such design intentions (that is, limitations and restrictions) demotivate “creative acts” of users (for the details of creative acts of users, see [2, 23]).
- Although the barrier free ordinance and code of practice for professionals has been implemented for many years, many public designs cannot cater to the needs of disabled people. Even if there are few facilities for disabled people, most of these facilities only narrowly consider the needs of people with motion disabilities. People with sensory and cognitive disabilities are very rarely considered. For example, there is very little consideration for the needs of visually impaired people in public toilet design [25]. Many tactile guide paths are poorly planned, implemented and managed and blind people find them unhelpful [13].

4. An All-round Approach for Public Design

According to the intensive observations, direct interviews and participatory workshops, some of the design directions for better quality of public design can be summarised as follows:

- Policymakers and professionals need to take a new approach to public design, i.e. an all-round approach that considers policy, implementation and management matters together (Figure 1).
- Users should be taken as the key factor (core consideration and driving force) in public design. Figure 1 illustrates that users will be positioned at the centre of the three levels of work (in the entire proposed research). This implies that policies, plans, designs, implementations, and management decisions should take users as the core objectives to serve.
- Public design — including in the forms of physical and virtual environments, products and images — should not be considered as a means only to serve a dominant group of people. The needs and preferences of a group of people also should not be considered as the “only” needs and preferences. Instead, public

design is required to be designed to serve “most” of the people with different and diverse needs and preferences.

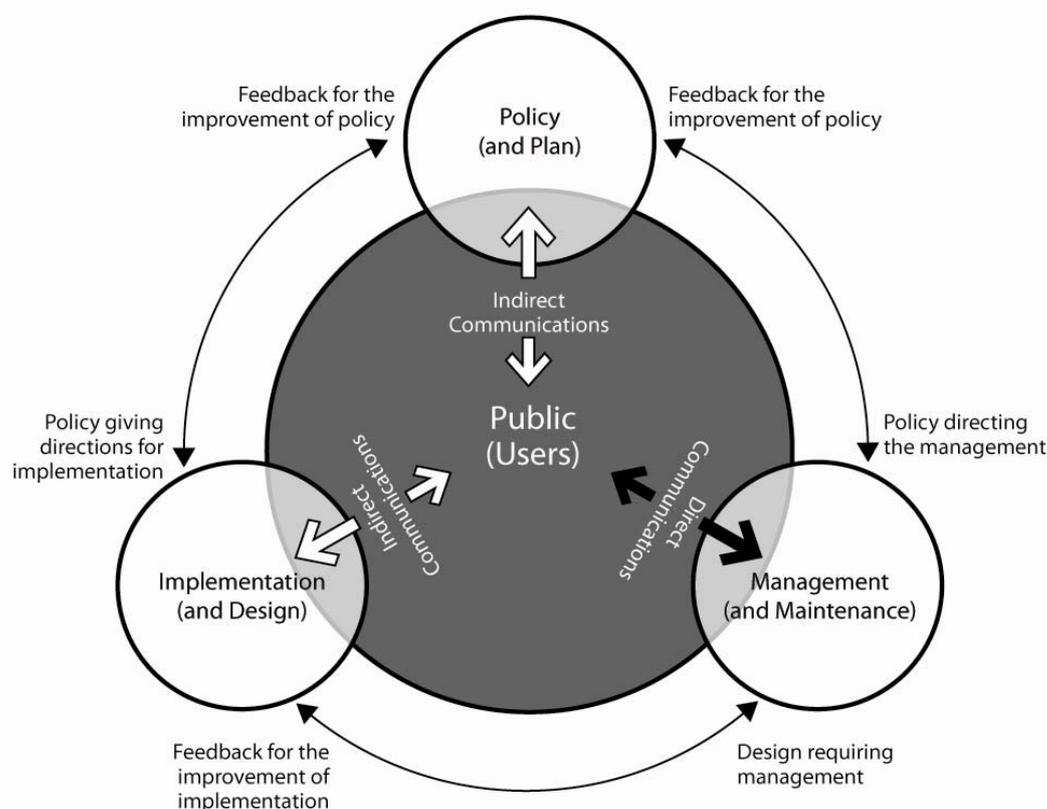


Figure 1. Framework of research and design: An all-round and user-centred approach. (Source and revised from [26].)

- Public design is required to fulfill the new and current rapidly changing urban needs. In particular we are now living in a spatial and temporal compressed world and things are changing quickly day by day [8]. Policymakers and professionals should work with different user groups closely and frequently in order to maintain user-fit designs, i.e. public design with a high degree of *userfitness* [24].
- Instead of function needs only, public design is also required to fulfill the physical, psychological, social, cultural and ideological needs and preferences of users.
- People are now living in a global world. Yet it does not mean that public design should be “normalised” to be all the same. Instead, local and community needs and preferences are required to be fulfilled. In fact, more researchers and designers in recent years have considered the importance of social and cultural diversity and local consideration in public design. This is also why more design critics advocate community design for public spaces and facilities. They claim that only local and community participation can guarantee a high quality and user-fit in public design [9-11, 19-20].
- “Control” seems a magic medicine today since it matches with the same pace of “public interest” in that the governments always used “control” as a kind of weapon to eliminate all other unwanted behaviour in

accessing public spaces and facilities. However, while public spaces are important for people to have self and community development, a certain degree of “freedom” should be considered to be provided in these spaces which, as their names suggest, are claimed for the public [14].

- Many recent newly designed public spaces and facilities emphasised on the physical satisfaction of users. However, it is not sufficient. Instead, public design should allow, encourage and motivate people to have more human communication and interaction. This objective is to allow open space facilities as a means to nurture social and community sense and identity [24]. It also gives advantage to bring a more harmonious and inclusive society through communication and interaction.
- Public design is required to cater for the specific needs and preferences of disabled people. One of the critical points is that disabled people most of the time lack public facilities to assist them to gain a better quality of life [13, 25]. Moreover, inclusive public design (such as parks with facilities for physically and visually disabled people) can encourage disabled people to get out of their home or small disabled community and in turn to have more communication with other people [27]. It is also the major spirit of public design that it can bring a more inclusive and harmonious society to all.

5. Conclusions

In the past, there was a lack of good quality public design in many countries, in particular in Asian countries, due to the poor living standards. Nevertheless, over the past several decades living standards have improved. However, the quality of public design has not received great improvement. One of the reasons is that many people put their focus on *personal* needs, such as personal home environment. In turn, people are more isolated and to a degree selfish, therefore, quality of *public* matters (i.e. domain, sphere, space) becomes a topic not to be concerned with.

In particular the current urban life pushes people to be more self-centred, yet public spaces are much more important to nurture people’s social and community sense and identity as well as belonging. The findings of the case studies conducted in Hong Kong illustrate that an all-round approach is necessary and important in public design. Policy, implementation and management considerations should be considered together in public design while they are linked coherently. Users should be put in the core of consideration. Failure to get the satisfaction of users (i.e. the public with diverse needs and preferences) renders public design meaningless even if it has an attractive appearance. Moreover, as public design is planned, designed, implemented and maintained for the “public”, its design consideration should not be biased. Instead, people with different motion, sensory and cognitive capabilities should be considered.

Today, although more policymakers and professionals realise “public” is an important aspect of quality of life, research on public design is still deficient and narrowly focused today. To have a better quality of public design, the governments and research institutes need to allocate more resources for research on the subject. Professionals in policymaking, implementation and management need to put down their dominating role, and work more closely with users. The public also need to raise their voice about their needs and preferences. It is significantly constructive if communities can participate in the process of public design. Obviously, the government and professionals should work as initiators and facilitators to motivate and support the “public” to participate actively

in the design process. For the deprived people and those with a smaller voice, governments, professionals and the public should provide more concern and care. Only through action, participation and inclusive approaches can research bring the quality of public design to better fit the continuously changing urban life.

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